

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS
PATENT OF THE UNITED STATES IS:

1. A computer-based facility for trading units of electrical energy, at least a portion of
5 each unit being from a renewable energy power production facility, comprising:

a first I/O mechanism configured to receive a bid message including an amount of
power to be delivered by said renewable energy power production facility to a power grid at a
predetermined future time;

a second I/O mechanism configured to receive an offer message including an offer
10 price for said amount of power;

a memory configured to hold computer readable instructions; and

a processor configured to execute said computer readable instructions so as to
implement,

an offer acceptance mechanism configured to determine if said offer price in
15 said offer message meets or exceeds a predetermined price, and

an acceptance notification mechanism configured to send a notification
message to a sender of said bid message informing said sender of an acceptance by a
purchaser.

2. The facility of claim 1, wherein said offer acceptance mechanism being configured
20 to determine if the offer price has been met if said offer price meets or exceeds other offers
within a predetermined period of time.

3. The facility of claim 1, wherein said offer acceptance mechanism is configured to
determine if said offer price is met when said offer price meets or exceeds a predetermined
price.

4. The facility of claim 1, wherein said at least a portion of said unit of power being
25

premier power.

5 5. The facility of claim 1, wherein said acceptance notification mechanism is configured to include in said notification message, at least one of an identity of a purchaser and a location of where the power from the renewal energy source is to be delivered on behalf of the purchaser.

 6. The facility of claim 1, wherein said message includes an indication that said amount of power being guaranteed by the power generated from another electrical power generation facility.

10 7. The facility of claim 6, wherein the amount of power is guaranteed by an options contract.

 8. The facility of claim 6, wherein said amount of power is guaranteed by a bi-lateral agreement between another electrical power generation facility and an operator of a renewable energy source such that a short fall from the renewable energy source is compensated for by increased production by the other electrical energy production facility.

15 9. The facility of claim 1, wherein said offer message includes the offer price from pooled resources from multiple investors, respective of the investors contributing predetermined portions of said pooled resources to constitute said offer price.

 10. The facility of claim 9, wherein said pooled resources are aggregated in the form of a mutual fund.

20 11. The facility of claim 1, wherein said second I/O mechanism is configured to receive the offer message from a remote computer facility that aggregates the pooled resources from the multiple investors at the remote computer facility and presents a portion of the pooled resources as the offer price.

 12. The facility of claim 2, wherein said acceptance notification mechanism informs

said remote computer facility of the acceptance so that said remote computer facility can account for the respective investment accrual attributable to respective of the multiple investors when said unit of energy is delivered to the power grid.

13. The facility of claim 1, wherein said processor is configured to provide an
5 evaluation mechanism that receives meteorological data from an external source so as to predict a likelihood of delivery of the renewal energy source at said predetermined future time.

14. The facility of claim 1, wherein said unit of power from the renewable energy
source being supplemented with power from a virtual energy storage facility during a period
10 of time when a load on the power grid is high and said renewal energy source being configured to provide power therefrom on behalf of the virtual energy storage facility in time periods when the load is low.

15. A method for coordinating power output from a renewable power production
facility with another power production facility so as to implement a virtual energy storage
15 mechanism for the renewable power production facility, comprising steps of:

producing a predetermined amount of electric power from the renewable power
production facility and from said other power production facility;

determining that an amount of power produced by the renewable power production
facility deviates from a threshold by a predetermined quantity;

20 informing said another power production facility of said predetermined quantity; and
adjusting a power output of said other power production facility by an amount that
corresponds with said predetermined quantity.

16. The method of Claim 15, wherein said renewable power production facility being
a wind turbine electric power production facility.

25 17. The method of Claim 15, further comprising a step of keeping an account of an

amount of virtual energy storage held by the virtual energy storage mechanism on behalf of the renewable power production facility, said balance reflecting changes by said predetermined quantity when said adjusting step is performed.

18. The method of Claim 17, wherein said keeping step includes allowing for a negative balance during peak production times, and adding to said balance during off-peak times.

19. The method of Claim 17, further comprising a step of selling a unit of power output from said renewable power production facility when a market sale price for said unit of power exceeds an estimated future value of said unit of power produced at a later time.

20. The method of Claim 15, further comprising a step of offering for sale a unit of power, said unit of power including an undetermined amount of electric power from said renewable power production facility at a predetermined future time and guaranteeing delivery of said unit of power with an adjusted power output from the another power production facility.

21. The method of Claim 20, further comprising a step of offering for sale said unit of power on a renewable exchange.

22. The method of Claim 21, further comprising a step of setting a price at which said power unit is offered for sale, said price being greater than or equal to an estimated value of storing the power unit in said virtual energy storage mechanism for use at a later time.

23. The method of Claim 21, further comprising a step of notifying an operator of said renewable power production facility when said power unit is sold.

24. The method of Claim 20, further comprising a step of obtaining transmission rights for transferring said power output from the renewable power production facility to a transmission grid that connects to the another power production facility when said adjusting

step adjusts the power output to a lower level than for what the another power production facility is obligated to provide.

25. The method of Claim 21, further comprising the step of offering meteorological data associated with when said power output from said renewable power production facility is offered for delivery, and estimating a likelihood of delivery using said meteorological data.

26. The method of Claim 25, further comprising a step of placing a value on the power unit based on a future likelihood of delivery.

27. The method of Claim 17, further comprising a step of selling a predetermined portion of an accumulated energy stored at said virtual energy storage mechanism.

28. The method of Claim 15, further comprising a step of controlling directly said another power production facility to implement said adjusting step through a ganged operation with said renewable power production facility.

29. The method of Claim 15, wherein said adjusting step includes adjusting the power output by receiving a data message via an electronic communication with said renewable power production facility.

30. The method of Claim 15, wherein said adjusting step includes informing said another power production facility of said predetermined quantity using at least one of non-electronic communication and telephonic communication.